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Interim Guidelines for
• The workplace

Workplace Prevention and Management of
Acquired Immunodeficiency Syndrome (AIDS)
and Human Immunodeficiency Virus Infections (HIV)

Manitoba
Health

WORKPLACE PREVENTION AND MANAGEMENT OF

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

AND

HUMAN IMMUNODEFICIENCY VIRUS INFECTIONS (HIV)

INTERIM

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PREFACE

The purpose of this series of infection control guidelines is to provide information on measures which should be taken to prevent the transmission of AIDS virus (HIV) infection in the community, in institutions and in other workplaces.

AIDS virus (HIV) infection is transmitted by the exchange of blood and/or body fluids; it is basically a sexually transmitted infection and modification of sexual practices is the single most important method of preventing infection.

In the workplace, handwashing and caution in the use and disposal of needles are the most important infection control procedures.

Most persons with AIDS virus (HIV) infection are asymptomatic and many are not aware that they are infected. For this reason, appropriate precautions must be taken for all persons at risk of being infected. In most situations the following guidelines are applicable to all persons - whether they are identified as being infected or not.

The titles available under the series of Workplace Prevention and Management of Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus Infections (HIV) are:

Guidelines for hospitals, laboratories, and pathologists
Guidelines for funeral directors
Guidelines for home care providers, and long term facilities
Guidelines for providers of pre-hospital emergency care and resuscitation training
Guidelines for dentistry
Guidelines for correctional and detentional facilities
Guidelines for schools and daycare centres
Guidelines for personal service workers.

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As the bibliography indicates, Canada Diseases Weekly Report (CDWR) and Morbidity Mortality Weekly Report (MMWR) recommendations are the basis for many of these guidelines.

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INTRODUCTION TO AIDS AND AIDS VIRUS (HIV) INFECTION

DEFINITION

Acquired Immunodeficiency Syndrome (AIDS) is a breakdown of the body's immune system - its natural defense against disease. Without this protection, a person is vulnerable to illnesses which a healthy immune system can prevent.

A person with AIDS fights an ongoing battle against many illnesses. Rare forms of pneumonia, skin cancer or brain infection may occur and are eventually fatal.

CAUSE

AIDS is caused by a virus - commonly called the Human Immunodeficiency Virus (HIV) - which attacks the body's immune system. Infection with this virus does not always lead to AIDS. Infected persons may have a mild illness or none at all. As yet, it is not known why some people become ill and others do not. The amount of virus, as well as infection by other viruses, may influence the development of AIDS.

SYMPTOMS

At present, the vast majority of persons with an AIDS virus (HIV) infection (approximately 70%) may feel completely well and have no symptoms. Some infected persons (approximately 25%) have some of the following symptoms: swelling of glands in the neck, armpits and groin, a thick white coating on the tongue, unexplained weight loss, persistent diarrhea, a harsh dry cough, tiredness, fever, or night sweats. These symptoms may be referred to as AIDS-related conditions (ARC). Only about five percent of persons presently infected with the AIDS virus (HIV) have the actual syndrome known as AIDS.

TRANSMISSION (Spread)

How the Virus is Spread

- The AIDS virus (HIV) has been shown to be spread from an infected person to an uninfected person in the following ways:
  - through sexual contact (penis/vagina, penis/rectum, mouth/rectum, mouth/genital)
  - through sharing needles used in injecting drugs,
  - through transfusion or injection of infectious blood or blood products; to help prevent this type of spread, all blood donations in Canada are now screened for evidence of AIDS virus (HIV) infection,
  - from an infected woman to her fetus or newly born baby.

- An individual can be infected with the virus that causes AIDS without having symptoms of AIDS or appearing ill. Infected individuals without symptoms can transmit the infection to others. Once infected, a person is presumed infected for life, but actual symptoms may not develop for many years.

- A single exposure to the AIDS virus (HIV) may result in infection.

How the Virus is NOT Spread

- There is no evidence that the virus is spread through casual social contact such as shaking hands, social kissing, coughing, sneezing, sharing swimming pools, bed linens, eating utensils, office equipment, or being next to or served by an infected person. There is no reason to avoid this type of contact with an infected person.

- It is not spread by the process of giving blood; new transfusion equipment is used for each donor.

- It is not spread by sexual intercourse between uninfected individuals who have maintained an exclusive sexual relationship.

RISK ACTIVITIES

1. Sexual activity with a number of different partners, particularly if they are anonymous.
2. Anal intercourse
3. Intravenous drug abuse.

GROUPS AT RISK

1. Homosexual and bisexual men
2. Intravenous drug abusers
3. Recipients of multiple blood or blood product transfusions prior to 1986
4. Children born to mothers infected with the AIDS virus (HIV)
5. Persons with multiple sex partners.
6. People who are sexually active with individuals who are or may be infected.

AIDS AND AIDS VIRUS (HIV) TESTING

At the present time, blood can routinely be tested only for signs of the virus. These signs are special blood components called antibodies which form in response to the virus. The blood test is available only at the request of a physician and should only be done after appropriate counselling has taken place.

Positive Antibody Test

If antibodies to the AIDS virus (HIV) are found in the blood, it means the person has been infected with this virus at some time. A positive test result does **NOT** mean that a person has AIDS or will get AIDS at some time in the future. It does **NOT** mean the person is immune to (protected from) the virus. It **DOES** indicate that the person has been exposed to the virus, is assumed to carry the virus and could spread it to others.

Negative Antibody Test

A negative test usually means that the person has not been infected with the AIDS virus (HIV).

TREATMENT

At this time there is no treatment which can repair the breakdown of the body's immune system. Treatments are available for many of the illnesses which develop because of the weakened immune system. However, AIDS is always fatal. Most patients die within three years of diagnosis.

PREVENTION

No vaccine is currently available. The only strategy to combat the spread of infection is to prevent the transmission of the virus from one person to another.

PUBLIC EDUCATION

GENERAL PUBLIC

Education of the general public is an essential component of the program to control AIDS and AIDS virus (HIV) infections. Knowledge of how the disease is spread and how to avoid infection should reduce much of the concern which exists in the community. At the same time, accurate information should motivate all individuals to realistically reduce their own risk of acquiring or transmitting this infection.

People infected with the virus may seem completely healthy and may not even know they have it. Although most persons in North America who are known to be infected are in groups at risk, anyone who is exposed can become infected. Therefore, it is prudent for everyone to take precautions to protect themselves from becoming infected. The following information and advice is appropriate for the general public:

- Infection through sexual contact can be avoided by abstaining from sexual activity. Sexually active persons can avoid the AIDS virus (HIV) infection by establishing a mutually exclusive relationship with an uninfected partner.

- Individuals who are sexually active should not have sex with many different people. The more partners one has, the greater the chances of having sex with an infected person.

- The use of condoms is strongly encouraged if there is any possibility that a sex partner has been exposed to or is infected with AIDS virus (HIV). A history of intravenous drug-use or of many sex partners increases the chance that a person may have been infected.

- Sharing needles and syringes should be avoided.

- Anal intercourse should be avoided. It is important to use a condom if one does have anal intercourse.

SCHOOLS

School boards and public health offices are encouraged to develop education programs to inform children, parents, and teachers about AIDS and AIDS virus (HIV) infections. Education about risk factors and risk reduction methods should be factual and non-judgmental.

SCHOOL AND COLLEGE AGED POPULATIONS

Education to these students should emphasize:

- One can virtually <u>eliminate</u> the risk of AIDS and AIDS virus (HIV) infections by saying no to sex and drugs.

- One can <u>reduce</u> the risk of AIDS by practicing responsible sexual behavior with a mutually exclusive partner and avoiding risk activities.

GROUPS AT RISK AND RISK ACTIVITIES

Persons in risk groups and persons who engage in risk activities should be informed about AIDS and AIDS virus (HIV) infections so they can take precautions to minimize their chances of acquiring or transmitting the infection.

The following advice is particularly appropriate for persons who are in known risk groups or who engage in risk activities:

- Use condoms during sexual activity. The proper use of condoms may prevent infection with the virus carried in semen and vaginal fluid.

- Do not have anal intercourse. It can cause sores or cuts in the rectum and the virus may get into the bloodstream through these breaks. If you do have anal intercourse, use a condom.

- Do not have oral sex if you have open sores or cuts in the mouth.

- Do not allow semen, blood, urine or feces to enter the body of a sexual partner.

- Infected women should use a reliable method of contraception to avoid pregnancy.

- Never share needles and syringes with anyone.

- Do not donate blood, organs or sperm.

THE WORKPLACE

It is essential that all individuals be knowledgeable about basic infection control practices and be encouraged to follow them. An educational effort directed to staff in all workplaces is an important aspect of preventing transmission of infections and reducing anxiety and misunderstanding about the infection. Although educational initiatives need to address communicable diseases in general, specific emphasis should be directed at AIDS and AIDS virus (HIV) infections. The goal of this education is to combat fear that is based on misinformation or lack of information and to minimize the risk of transmission of AIDS virus (HIV) by promoting good health practices. These include routine use of infection control precautions and eliminating risk behaviors. Staff also need to be provided with information regarding the signs and symptoms of AIDS virus (HIV) infections, the methods of transmission of the virus and preventive measures. This information should be presented in terms that are easily understood and should include literature in foreign languages if required.

GUIDELINES FOR THE WORKPLACE

PERSONAL-SERVICE WORKERS

Personal-Service Workers (PSWs) are defined as those whose occupations involve close personal contact with clients (e.g., hairdressers, barbers, estheticians, cosmetologists, manicurists, pedicurists, massage therapists). PSWs whose services require needles or other instruments that penetrate the skin (tattooing, ear piercing, acupuncture, etc.) should follow precautions indicated for Health Care Workers. Although there is no evidence of transmission of AIDS virus (HIV) from clients to PSWs, from PSWs to clients, or between clients of PSWs, a risk of transmission would exist from PSWs to clients and vice versa in situations where there is both:

(1) trauma to one of the individuals that would provide a portal of entry for the virus and

(2) access of blood or body fluids from one infected person to the open tissue of the other, as could occur if either sustained a cut.

A risk of transmission from client to client exists when instruments contaminated with blood are not sterilized or disinfected between clients. However, hepatitis B virus (HBV) transmission has been documented only rarely in acupuncture, ear piercing, weight loss clinics, tattoo establishments and never in other personal-service settings. This indicates that any risk for AIDS virus (HIV) transmission in personal-service settings must be extremely low.

All PSWs should be educated about transmission of bloodborne infections, including AIDS virus (HIV) and HBV. Such education should emphasize principles of good hygiene, cleaning, and disinfection. This education can be accomplished by national or provincial professional organizations, with assistance from provincial and local health departments. License requirements should include evidence of such education.

Instruments that are intended to penetrate the skin (e.g., tattooing and acupuncture needles, ear piercing devices) should be used once and disposed

of or be thoroughly cleaned and sterilized after each use. The procedures recommended for health-care institutions should be used. Instruments not intended to penetrate the skin but which may become contaminated with blood (e.g., razors), should be used for only one client and be disposed of. Any PSW with weeping lesions or dermatitis should refrain from direct contact with clients until the condition resolves. PSWs known to be infected with AIDS virus (HIV) need not be restricted from work unless they have evidence of other infections or illnesses for which any PSW should also be restricted.

Routine blood testing of PSWs for antibody to AIDS virus (HIV) is not recommended.

FOOD-SERVICE WORKERS

Food-Service Workers (FSWs) are defined as individuals whose occupations involve the preparation or serving of food or beverages (e.g., cooks, caterers, servers, waiters, bartenders, airline attendants). All scientific research indicates that bloodborne and sexually transmitted infections are not transmitted during the preparation or serving of food or beverages. There are no instances of HBV or AIDS virus (HIV) transmission documented in this setting.

All FSWs should follow recommended standards and practices of good personal hygiene and food sanitation. All FSWs should exercise care to avoid injury to hands when preparing food. Should such an injury occur, both esthetic and sanitary considerations would dictate that food contaminated with blood be discarded. FSWs known to be infected with AIDS virus (HIV) need not be restricted from work unless they have evidence of other infection or illness for which any FSW would normally be restricted.

Routine blood testing of FSWs for AIDS virus (HIV) antibodies is not recommended.

OTHER WORKERS SHARING THE SAME WORK ENVIRONMENT

No known risk of transmission to co-workers, clients, or consumers exists from AIDS virus (HIV) infected workers in other settings (e.g., offices,

schools, detention facilities, factories, construction sites). Workers known to be infected with AIDS-virus should not be restricted from work solely based on this finding. Also, they should not be restricted from using telephones, office equipment, toilets, showers, eating facilities, and water fountains. Equipment contaminated with blood or other body fluids of any worker, regardless of AIDS virus (HIV) infection status, should be cleaned with soap and water or a detergent. A disinfectant such as bleach solution (See Glossary, page 15) should be used to wipe the area after cleaning.

OTHER ISSUES IN THE WORKPLACE

The information and recommendations contained in this document do not address all the potential issues that may have to be considered when making specific employment decisions for persons with AIDS virus (HIV) infection. The diagnosis of AIDS virus (HIV) infection may evoke unwarranted fear and suspicion in some co-workers. Other issues that may be considered include the need for confidentiality, applicable federal, provincial, or municipal laws governing occupational safety and health, civil rights of employees, worker's compensation laws, provisions of collective bargaining agreements, confidentiality of medical records, informed consent, employee and patient privacy rights, and employee right-to-know statutes.

MANAGEMENT OF POSSIBLE WORKPLACE EXPOSURE TO AIDS VIRUS (HIV)

If a worker or a patient/client has a needle puncture or cut to the skin or mucous membrane (e.g., splash to the eye or mouth) exposure to blood or other body fluids, the source person should be assessed clinically and epidemiologically by a physician to determine the possibility of AIDS virus (HIV) infection.

If such infection may exist, the source person should be informed of the incident and requested to consent to blood testing for evidence of AIDS virus infection. If the source patient is found to be infected or declines testing, the person who was exposed to possible infection should be evaluated clinically and serologically for evidence of AIDS virus (HIV) infection as soon as possible. If the exposed person's first blood test is negative, he or she should be retested after a period of 6 weeks and again at 3, 6 and 12 month intervals to determine if transmission has occurred. If the source person continues to show a negative test and has no evidence of AIDS virus (HIV) infection, no further follow-up is necessary.

GLOSSARY

AIDS	Acquired Immunodeficiency Syndrome.
ARC	AIDS-related Complex.
HIV	Human Immunodeficiency Virus: the agent which causes AIDS; formerly known as Human T-Lymphotropic Virus III/ Lymphadenopathy Associated Virus (HTLV-III /LAV).
HCW	Health Care Worker
HBV	Hepatitis B Virus
PSW	Personal Service Worker
Antiseptic	a chemical having the ability to destroy potentially infective micro-organisms and which can be used safely on living tissues.
Bleach Solution	the most commonly recommended disinfectant in these guidelines is bleach solution (i.e. a 0.5% sodium hypochlorite solution which can be prepared by mixing household chlorine bleach - (5.25%) one part bleach to nine parts water). It must be prepared fresh daily. This solution is corrosive and must be used with caution on metal surfaces.
Cleaning	Scrubbing and washing, with hot water, soap or detergent to remove infectious agents and/or organic matter from surfaces.
Disinfection	the use of germicidal chemical agents to destroy infectious agents.
Sterilization	the use of a physical process or chemical agents to eliminate all viable microorganisms. Steam and gas autoclaving and dry heat ovens are the most common methods.

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